

MEDICAL CARE AND SOCIAL POLICY IN
SEVENTEENTH CENTURY ENGLAND*

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WHEN Tudor England moved out of the Middle Ages, one result of the disappearance of the old order was an increase in poverty.¹ This problem was a matter of grave concern, for poverty was regarded as a potential danger to the security of the State. Various acts designed to deal with the poor were passed during the sixteenth century, and these measures were finally consolidated in the Elizabethan law of 1601 (43 Elizabeth, Chapter 2), which remained the basis of English poor law administration for over two centuries.

Administrative responsibility for the relief and government of the poor was assigned to the parish. As the unit of ecclesiastical administration, it was found to be a convenient division for local government. Thus when it became necessary to make systematic provision for the poor, the parochial machinery was adapted to the purpose; and the relation between the poor and the parish became peculiarly close and intimate.

While the law of 1601 makes no specific mention of health matters, it was intended to relieve the "lame, impotent, old, blind, and such other among them being poor and not able to work." As time went on, however, this simple statement was expanded in practice to include the provision of medical and nursing care.

It appears probable that the policy laid down in 1601 was followed until the outbreak of the Civil War. Wartime conditions and official neglect led to a disorganization of the poor law administration. This situation was further aggravated by the necessity of providing for wounded soldiers and their dependents.² These urgent and exceptional matters demanded attention, and emergency measures were taken to deal with them. In the main, however, poor law policy under the Com-

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monwealth followed along lines previously laid down. Nevertheless, a changed attitude toward the problem of poverty was developed during the period.

There is small doubt that during these years poverty came increasingly to be regarded as a disgraceful social disease. In this respect, the Interregnum anticipated the earlier eighteenth century. This position may in considerable measure be attributed to the influence of Puritanism, that is, the core of common values accepted by the Protestant sects of seventeenth century England. Within this value system certain doctrines are fundamental, among them predestination and justification through good works. Intimately associated with these theological values was an insistence on diligence and industry as necessary and worthwhile, with definite stress on utilitarian considerations. Richard Baxter in his *Christian Directory* justified this principle in these terms: "The public welfare, or the good of the many," he says, "is to be valued above your own. Every man therefore is bound to do all the good he can to others, especially for the church and the commonwealth. And this is not done by idleness, but by labour! As the bees labour to replenish their hive, so man being a sociable creature must labour for the good of the society which he belongs to, in which his own is contained as a part."³ Furthermore, since methodical, constant labor makes possible success in one's calling, and such success is a sign of salvation, constancy in labor becomes a worthwhile end in itself. From this viewpoint poverty was an abomination, due to lack of moral stamina and systematic application.

But while poverty was regarded as an individual vice and condemned on ethical grounds, it was also discovered to be a potential source of profit to the state and therefore a public convenience. Projects for dealing with the poor and for utilizing their labor were proposed during the Commonwealth, and the number of these proposals increased greatly in the decades following the Restoration. Apparent in these proposals is a mingling of motives, among which mercantilistic considerations and the prospect of profits are prominent. With an insight which is quite remarkable, efforts were made to compute the national cost of idleness, and elaborate calculations were developed as to the increase in national wealth which would result if England's poor were made productive.

Among the proponents of such schemes some were aware of the

health needs of the poor. In 1641 there appeared *A Description of the Famous Kingdome of Macaria* by Samuel Hartlib. In this Utopia, Hartlib was interested mainly in proposals for social and economic reform. A special feature of Macaria, however, is a "College of Experience, where they deliver out, yearly, such medicines as they find out by experience; and all such as shall be able to demonstrate any experiment, for the health or wealth of other men, are honourably rewarded at the publick charge."⁴ Hartlib also felt that parish priests would be more useful if they acquired some knowledge of healing, and he pointed out that in Macaria "they think it as absurd for a Divine to be without skill of Physick, as it is to put new wine into old bottles." These comments should not be considered simply as quaint conceits, but must rather be regarded as serious proposals to improve the provision of medical care, especially to the poor. In Caroline England and under the Commonwealth the number of trained physicians was small. During this period medical practitioners more and more formed a group marked by steadily increasing status and remuneration so that their services generally were not available to the poor.⁵ At the same time, there is evidence from parish registers and other sources that the clergy did provide home remedies and advice on medical care.⁶

Clearly Hartlib's proposals were in line with these contemporary realities and needs. Evidence for such a view is provided from several different directions. The existence of a medical care problem is confirmed by John Cooke, a conservative and a former member of Charles I's government. In his pamphlet *Unum necessarium*, published in 1648, Cooke pleads for relief of the poor including free medical service.⁷ A further indication of the apposite and constructive character of Hartlib's scheme is provided from the opposite end of the political spectrum, from the extreme left wing of the Puritan movement. In 1652 there appeared a book entitled *The Law of Freedom in a Platform or True Magistracy Restored*. The author was Gerrard Winstanley, spokesman for the group called Diggers or True Levellers, an offshoot of the popular democratic party known as the Levellers.⁸ This book set out a plan for an agrarian socialist commonwealth. In Winstanley's plan a prominent place was assigned to the clergy. To a large extent the function of the minister was to be an educator. Among his duties would be the instruction of his parishioners in the arts and sciences, including medicine and surgery. It may be that Winstanley was acquainted with

Hartlib's suggestion about the clergy and adopted it.

Meanwhile, Hartlib had developed another scheme to deal with the needs of the poor. He proposed, in 1647, the establishment of an Office of Addresses "for the Relief of Human Necessities."⁹ This projected Office would function as a labor exchange, information bureau, and a place for the transaction of commercial business. Here would be maintained various registers, of which the most important would deal with the needs of the poor. These would include a list of physicians willing to give their services gratis. Efforts to set up such offices were made in 1650 by Henry Robinson in London, and about the same time in London and Westminster by Hartlib himself. It is not clear, however, whether lists of physicians were maintained at any of these offices.

In 1648, there was published in London a small book of thirty pages entitled *The Advice of W. P. to Mr. S. Hartlib for the Advancement of Some Particular Parts of Learning*. The author was William Petty, then "twenty-four years of age, a perfect Frenchman, and a good linguist in other vulgar languages, besides Latin and Greek; a most rare and exact anatomist and excelling in all mathematical and mechanical learning. . . ." ¹⁰ Directly inspired by Hartlib, this booklet presented several proposals for the reform of education. Petty's proposals are in line with a trend found among the Puritans of both the right and left, namely, a desire to apply knowledge to the immediate and practical needs of society. Education is a matter of vital concern to all revolutionary parties, and the leaders and spokesmen of the English revolution were fully aware of this fact. Indeed, the advent of the Long Parliament was the signal for an outburst of discussion and action on the reform of education.¹¹ The positive proposals for reform reflect the chief aspirations of the rising English middle class—utilitarianism, individualism, and the experimental philosophy. These ideals find concrete expression in Petty's scheme. Of special interest is his proposal for a hospital where physicians and surgeons would give and receive instruction. The hospital would be fully equipped with an anatomical theater, a chemical laboratory, an apothecary shop, a garden and a library. Among the chief personnel would be a physician, "skilled at large in the phenomena of Nature," who "shall either dissect, or overlook the Dissection of Bodies dying of Diseases; and, lastly shall take care that all luciferous Experiments whatsoever may be carefully brought to him, and recorded for the Benefit of Posterity." In addition, there

would be an assistant physician who would maintain suitable records on all patients, a surgeon, and an apothecary who would be in charge of the garden. The young medical student would learn the practical side of his profession by accompanying the members of the medical staff from patient to patient.

More clearly than anyone else, perhaps, Petty represents that combination of utilitarianism, commercial drive and experimental philosophy which characterized the approach to social problems in the period following the Restoration and during the eighteenth century.¹² Petty's proposals for educational reform and advancement of knowledge stem in a straight line from Bacon's *New Atlantis* by way of Hartlib's *Macaria*, and point to the enthusiastic promulgation of elaborate projects for commercial undertakings, technological innovations and social reforms during the later seventeenth and earlier eighteenth centuries. This penchant for projects when applied to the burning issue of the poor was to be one of the significant factors determining the framework of theory and practice within which social problems of health would be viewed in the eighteenth and early nineteenth centuries.

Petty is representative, however, not only as a projector, but equally as a pioneer in the quantitative study of social phenomena. The application of the numerical method to the analysis of social problems was a development of first-rate importance, and destined to prove extraordinarily fruitful for the study of the social relations of health and disease. Petty was convinced that social and economic problems could be dealt with most effectively in terms of functional analysis and measurement, what he termed political arithmetic. His employment of this method was not merely a happy chance; he was keenly aware of the end he wished to achieve and of the means by which he proposed to do so.

In the preface to the *Political Anatomy of Ireland*, Petty says: "Sir Francis Bacon, in his *Advancement of Learning*, hath made a judicious parallel in many particulars, between the body natural, and body politic, and between the arts of preserving both in health and strength: and it is as reasonable, that as anatomy is the best foundation of one, so also of the other; and that to practice upon the politick, without knowing the symmetry, fabrick, and proportion of it, is as casual as the practice of old-women and empyricks. Now, because anatomy is not only necessary in physicians, but laudable in every philosophical

person whatsoever; I therefore have attempted the first essay of political anatomy.”¹³

The means for such study is political arithmetic. Petty's posthumously published work, *Political Arithmetick*, describes it in these terms: “The method I take,” he says, “is not yet very usual; for instead of using only comparative and superlative words, and intellectual arguments, I have taken the course (as a specimen of the political arithmetic I have long aimed at) to express myself in terms of number; weight, or measure; to use only arguments of sense, and to consider only such causes, as have visible foundations in nature; leaving those that depend upon the mutable minds, opinions, appetites, and passions of particular men, to the consideration of others.”¹⁴

While Petty coined the term political arithmetic and indicated the significance of a quantitative study of social fact, the most valuable pioneer work in this area was done by his friend John Graunt (1620-1674), a London haberdasher. Graunt's classic contribution appeared in 1662 and was called *Natural and Political Observations . . . upon the Bills of Mortality*. While Graunt's work was not without antecedents, he was a statistical pioneer blazing a new trail.

Far back in the Middle Ages, numerical data had been collected for specific purposes. The Domesday Book, for instance, provided a complete review of the resources of the kingdom conquered by the Normans, but no statistical use was made of this information.¹⁵ Later, political writers, such as Machiavelli, made use of figures, and mathematical calculations began more and more to be employed in public affairs, particularly by rulers in making surveys of the resources and revenues of their domains. Typical is the survey carried out by a German prince, Wilhelm IV, Landgrave of Hessen-Cassel, who ruled from 1567 to 1592. At the same time, advances in mathematical knowledge and expansion of scientific interests intermingled with these political and economic influences to bring about a still greater employment of numerical information. Two other streams of influence reinforced this trend. One was an increasing awareness of regularity and order in the world of human affairs. The perception of law and order in the physical realm undoubtedly provided a basis for this view. Recognition of an orderly universe made it seem logical to infer that the same might be true for society. The other stream of influence came from the effects of everyday thought and practice. Throughout this period, more and

more people were learning how to do simple calculations and make measurements. This spread of the knowledge of elementary mathematics helped to prepare the way for the numerical study of social facts.

Thus it was not a matter of chance that a man like Graunt began to search for mathematical regularities in such human events as births and deaths, the incidence of disease, and related matters. Nor was his search in vain, for Graunt brought to light a number of very important facts. In the first place, he demonstrated the regularity of certain social and vital phenomena. Thus he noted "That among the several casualties some bear a constant proportion into the whole number of burials; such are chronical diseases, and the diseases whereunto the city is most subject; as for example, consumptions, dropsies, jaundice, gout, stone, palsie, scurvy, rising of the lights or mother, rickets, aged, agues, fevers, bloody flux, and scowring: nay, some accidents, as grief, drowning, men's making away themselves, and being kill'd by several accidents, &c. do the like; whereas epidemical and malignant diseases, as the plague, purples, spotted fever, smallpox and measles do not keep that equality; so as in some years, or months there died ten times as many as in others."¹⁶ Secondly, Graunt was the first to note the excess of male over female births as well as the eventual approximate numerical equality of the sexes. Thirdly, he called attention to the excess of the urban over the rural death rate.

In making these discoveries, Graunt clearly demonstrated the usefulness of the statistical approach which Petty advocated. But while he indicated some of the social relations of vital phenomena, as well as the social significance of his studies, Graunt did not pursue further this aspect of the matter. It was precisely in this area, however, that Petty made his most significant contribution.

The inspiration of Petty's interest in political arithmetic is not far to seek. He was concerned with all sorts of practical affairs: fiscal matters, trade, population, education, the plague. Full of the idea that numerical data could throw light on such problems, he employed figures and calculations wherever he could. At all times, however, the focus of interest is not on calculation for its own sake, but always in relation to the specific political, economic or social problem involved. This characteristic orientation is clearly revealed whenever he deals with matters of health, in his discussions of population, and in his various statistical proposals.¹⁷ Throughout his numerous published and un-

published writings occur schemes to increase the power and prestige of England.¹⁸ As an essential element of these schemes, Petty urged repeatedly the collection of statistical data on population, trade, manufacture, education, diseases, revenue and many other topics. The breadth of his approach is strikingly illuminated by his "Method of enquiring into the state of any country." This memorandum outlined a complete scheme for a political, economic, social and health survey. Among the topics listed are not only a census of the population, and the nature of the public revenue, but even such questions as "What are the bookes that do sell most."¹⁹

Within this broad frame of reference Petty was able to grasp clearly the social relations and implications of a number of health problems. Thus, he recognized that it was not enough simply to acknowledge natural fertility and population as major conditions of national prosperity. The acceptance of this premise went hand in hand with the responsibility for removing impediments to the full development of these resources. A major aspect of this responsibility was the creation of conditions and facilities which would promote health, prevent disease and render medical care easily accessible to those who should have it. The achievement of these aims required that medical knowledge be advanced to the greatest degree possible, and Petty pointed out that it is the duty of the state to foster medical progress. "Now suppose," he said, in a lecture given at Dublin in 1676, "that in the King's Dominions there be 9 millions of people, of which 360,000 dye every year, and from whom 440,000 are borne. And suppose that by the advancement of the art of Medicine, a quarter part fewer dye. Then the King will gain and save 200,000 subjects per annum, which valued at 20£ per head, the lowest price of slaves, will make 4 million per annum benefit to the Commonwealth. Now I consider that the thorough and profound search into the naturall and entire state of animals by anatomy, and into their depraved and vitiated estate by the comparative and contrasted observations in hospitalls, may in 100 years advance the art of medicine as above said. Wherefore it is not the Interest of the State to leave Phisitians and Patients (as now) to their own shifts."²⁰

Almost thirty years earlier, Petty had recognized the crucial importance of the hospital in the training of physicians and in the furtherance of medical research, and to this point he returned again and again. In various connections, he urged the establishment of hospitals. In the

lecture cited above, he commented that "Another cause of defect in the art of medicine and consequently of its contempt is that there have not been Hospitalls for the accommodation of sick people, Rich as well as Poor, so instituted and fitted as to encourage all sick persons to resort unto them—Every sort of such hospitalls to differ only in splendor, but not at all in the Sufficiency for the means and remedy for the Patients health. For by such means the most able understandings might be encouraged, equally with the best of the professions, to spend and to dedicate themselves wholly to this faculty; and a man shall learn in a well regulated hospitall, where he may within halfe a hower's time observe his choice of 1000 patients, more in one yeare then in ten without it, even by reading the best Books that can be written. For, as one may learn to know and distinguish a face better by one minut's Inspection then by reading ten sheets of paper in the description of it, So wee may learn more of sick people by the Joynt assistance of all our sences together than by the lame descriptions of words alone."²¹

Petty supplemented these general recommendations by specific proposals. These dealt particularly with health problems where he felt that the state by establishing hospitals would derive the greatest gain. Thus, in 1687, in "An Essay for the Emprovement of London," Petty proposed "That there bee a Council of Health viz. for the Plague, acute and epidemicall diseases, aged foundlings, as also for persons and houses of correction, and all sorts of hospitalls and women in child-bed."²² Another memorandum composed in the same year suggests a hospital of 1000 beds for London. For Petty, the basic political and economic importance of population was axiomatic. Consequently, any measures to prevent impairment of population by disease and death were matters of high concern. Control of communicable disease, especially plague, and the saving of infant life would, Petty felt, contribute most toward this end. This conviction is reflected in his various suggestions for combating plague, and advocating maternity hospitals. In dealing with the plague, he suggested that the government should consider carefully "what sum of money, and Meanes ought to be prudently ventured for the probable cutting off 3 fifths of this Calamity."²³ Petty recommended the establishment of isolation hospitals, to which plague patients would be removed and where they would receive medical care. To buttress this recommendation, and in general the usefulness of any measures undertaken to combat the ravages of

the plague, he undertook to calculate the economic loss due the disease.²⁴ Similarly, he advocated the creation of maternity hospitals, having in mind particularly unmarried pregnant women. Petty contemplated that in return for such provision provided by government, the children would become wards of the state and serve it for twenty-five years, thus adding to the labor resources of the country.²⁵ He also believed that certain other groups in the population were of direct concern to government. These elements comprised the occupational groups esteemed as most productive—farmers, manufacturers, merchants, seamen and soldiers. In his opinion, these occupations “are the very pillars of any commonwealth.”²⁶ In keeping with this point of view are suggestions by Petty that studies be made of occupational morbidity and mortality.²⁷

Finally, Petty realized that to achieve these ends an adequate supply of medical personnel would be required. Consequently, he proposed that an analysis be made of the medical need, using methods such as those of Graunt, and then on this basis to calculate the numbers of physicians, surgeons and others necessary to meet this need. In short, Petty proposed that the number of medical personnel be planned and adjusted to meet the actual need for medical care. “As for Physicians,” he wrote, “it is not hard by the help of the observations which have been lately made upon the Bills of Mortality,²⁸ to know how many are sick in *London* by the numbers of them that dye, and by the proportions of the City to finde out the same of the Country; and by both by the advice of the learned Colledge of that Faculty to calculate how many Physicians were requisite for the whole Nation; and consequently, how many students in that art to permit and encourage; and lastly, having calculated these numbers, to adoptate a proportion of Chyrurgeons, Apothecaries, and Nurses to them, and so by the whole to cut off and extinguish that infinite swarm of vain pretenders unto, and abusers of that God-like Faculty, which of all Secular Employments our Saviour himself after he began to preach engaged himself upon.”²⁹

Petty's views on the social and economic implications of health problems are beyond all comparison the most significant English contribution to this area of social thought prior to the nineteenth century. To get a clear picture of Petty's position it is necessary to piece together numerous separate statements. When this is done, however, there emerges a relatively coherent and logical structure. Essentially a disciple

of Hobbes in his political theory, Petty accepted the thesis that government is justified in carrying out any policy or instituting measures by which national power and wealth would be increased. At the same time, he recognized that while individuals or groups might be harnessed to the needs of the state, public policy should also aim at improving their living standards. Populousness was exceedingly desirable, but the people should also be healthy and happy.

Petty was not alone in dealing with the social aspects of health problems, or in attempting to study them quantitatively. Among his contemporaries and followers these interests were expressed in varying degree and some were keenly alive to the importance of a healthy population as a factor in national opulence. Closest to Petty, perhaps, was his younger contemporary Nehemiah Grew (1641-1712), also a physician, but best known today for his work in plant anatomy. Sometime in 1707 apparently, Grew prepared for Queen Anne a memorandum entitled *The Meanes of a Most Ample Encrease of the Wealth and Strength of England in a Few Years Humbly represented to her Majestie In the Fifth Year of Her Reign*.³⁰ As the title indicates, this document outlined an economic program to enhance the prosperity and power of England. Grew's focus of interest was the same as Petty's, and his handling of health problems occurs within a similar context. He knew Petty, to whom he refers as "my late Honoured Friend," and frequently mentions Petty's calculations, though he does not always accept them. Like Petty in the *Political Anatomy of Ireland*, Grew couched his discussion in terms of anatomy and physiology. In his opinion the four basic elements in the economic anatomy of England are land, manufactures, foreign trade, and population. Ultimately, however, Grew's program depended on the size and quality of the population, and to this subject he devoted the fourth section of his memorandum. Grew assumed as axiomatic the need for increasing population to provide the necessary labor power. Among his recommendations toward this end, he urged that the state do all in its power to maintain health and prevent disease. Grew emphasized the economic burden of disease, commenting that in economic terms the sick are worse than dead because they become either public or private charges. To make medical care available to all, Grew proposed that the government regulate physicians' fees according to their experience. If this were done the cost of medical care could be reduced and thus made accessible to those who needed it.

Despite their bold and penetrating character, the ideas of Petty and Grew had no immediately tangible results. Their proposals did not lead to a satisfaction of human needs in relation to health, because they were implicitly premised on a type of governmental structure which was even then being discarded. Effective implementation would have required the existence of a well-developed local administrative mechanism operating under strongly centralized control, in a manner comparable to the organizations of France or Prussia. But it was precisely these organs of administration which were then disappearing. After 1660 there was no planned effort to use local officials as efficient organs of a consistent policy.

Cunningham, the economic historian, employed the term "parliamentary Colbertism" to describe this period and its continuation in the eighteenth century.³¹ Although this designation is only partly correct, it calls attention to contemporary French developments, and by inviting comparison makes it possible to focus more sharply the characteristic features of English evolution. Colbert created a whole system of administrative regulation under central control, and built up a bureaucracy to keep the machinery in operation. In England, on the other hand, the administrative apparatus which had been developed under the first Stuarts had collapsed and was not being replaced. To a considerable degree this was due to a shift of emphasis in the interest of the state. Following the Restoration, and particularly after the revolution of 1688, the focus of governmental interest shifted more and more to commercial and colonial policy, and regulation in relation to these areas of activity. This had important results on the development of social policy, and on the evolution of ideas concerning the social relations of health.

As the control of the Crown relaxed, local government in the course of the eighteenth century became increasingly a matter of local initiative. In England, local government was carried on by the counties, and by the parishes into which the counties were divided. As a result, the county officials, especially the justices of the peace, gained in power and prestige. It was to the justices that the parish authorities were accountable.³² There was very little explicit theorizing about this trend of development, but it is clearly reflected in the treatment of social problems, and provides the frame of reference within which thought and action in matters of health must be viewed. Indeed, the outstanding

feature of internal English administration during the period from the Act of Settlement and Removal, passed in 1662, to the Poor Law Amendment Act of 1834 is its intensely parochial character. As a result, England was deprived of any uniform social policy, since there was no machinery to subordinate the interests of the parish to the welfare of the larger community.

During the earlier part of this period, ideas, proposals and programs relating to the social aspects of health took as points of departure either the responsibility of the parish in relieving the needs of the poor, or the desire to increase national wealth by employing the destitute in manufacture. The Elizabethan Poor Law had provided that the parish would carry out the "necessary Relief of the lame, impotent, old, blind and such other among them . . . not able to work," and in time the scope of this provision came to include medical care. Such provision for the sick meant that the parish had to assume considerable responsibilities. However, the parish officers generally had neither training nor desire to engage in such activities. This situation gave rise in parochial administration to the common practice of contracting with private persons to perform public tasks. This system of "contracting" or "farming out the poor" became a typical feature of English Poor Law administration in the eighteenth century. Following this general pattern, parish officers often contracted with a local practitioner for medical treatment of their poor.³³ These contracts varied from parish to parish. Sometimes, the medical practitioner contracted to attend all the poor living in the parish, or only those for whom the parish was legally responsible, and to supply medicine as well. Occasionally, a separate agreement was made with an apothecary. Other contracts exempted such items as smallpox inoculation or epidemic diseases. Some parishes paid per-head, others on a fee for service basis. The practice of farming out public functions such as poor relief became popular because it was regarded as offering an opportunity for reducing taxes. A system of this kind was bound to lead to abuses. Nevertheless, it must be recognized that medical care of a sort was provided, and that the pattern of administration developed in this area had an influence in shaping later schemes for the provision of medical care.

Nonetheless, little attention was given to this subject by contemporary writers and theorists. Such ideas as were developed concerning social problems of health arose rather out of another aspect of the

problem of the poor, namely, the desire to put the poor to work. The problem of the laboring poor, concretely symbolized in the figure of the pauper, occupied a strategic position in the social logic of the eighteenth century. It must be recognized, however, that the category of the "poor" was a broad one, practically synonymous with the "common people." Generally speaking, the "poor" meant all the people who were actually in need, as well as all those potentially eligible for this unenviable distinction.

Behind this concern with the laboring poor were several distinctive motivations. Each parish was responsible for the maintenance of its own poor, and consequently was concerned to reduce this burden as far as possible. It was felt that this might be accomplished by making arrangements to employ the poor. At the same time, this approach was in keeping with the contemporary desire to stimulate national prosperity by using the unemployed poor in manufactures. England at this time was entering upon the path toward industrialism, and the proponents of this view believed that the poor could provide an easily available labor force for the expansion of industry. Between the Restoration and the end of the eighteenth century scores of books and pamphlets were written on this subject, and many projects were suggested to deal with the problem. These proposals, as well as the optimism and eagerness with which they were put forth are characteristic of the tendency of the period to indulge in projects. This tendency is perhaps best described in the words of Daniel Defoe. "Necessity, which is allowed to be the mother of invention," he wrote in 1697, "has so violently agitated the wits of men at this time, that it seems not at all improper, by way of distinction, to call it the Projecting Age. For though in times of war and public confusions the like humour of invention has seemed to stir, yet, without being partial to the present, it is, I think, no injury to say the past ages have never come up to the degree of projecting and inventing, as it refers to matters of negoce, and methods of civil polity, which we see this age arrived to."³⁴

The avowed aim of the projectors was to create centers of manufacture in the form of workhouses where the poor could learn to support themselves. This idea did not actually become popular until the end of the seventeenth century, when a corporation for the relief and employment of the poor was established by act of Parliament at Bristol in 1696. Here all the parishes of the town were combined into a single

unit. This experiment developed out of a frank recognition that the individual parish was too small a unit to provide remunerative employment for the poor.³⁵ The example set by Bristol was soon followed by other towns, and during the earlier eighteenth century there was a steady increase in the number of workhouses. It is of interest to note that while the Board of Trade was considering the problem of pauperism, John Locke, the philosopher, then a member of the Board, proposed a nation-wide system of workhouses.³⁶ The Bristol experiment probably influenced Locke, particularly since he was a friend of John Cary, its leading proponent.

While the enthusiastic belief in the efficacy of workhouses to deal with poverty was never realized, plans and programs for coping with the health problems of the poor were developed and some of these were even put into practice. Closest to the prevailing parochial pattern was the mode of providing medical care for the sick poor at Bristol. "To such as were sick," stated Carey, "we gave warrants to our physician to visit them; such as wanted the assistance of our surgeons were directed to them, and all were relieved till they were able to work; by which means the Poor, having been well attended, were set at work again, who by neglect might with their families, have been chargeable to the corporation."³⁷

More imaginative, immeasurably broader in scope, and based on considerable insight into the socio-economic aspects of health was the plan proposed by John Bellers in 1714.³⁸ Bellers (1654-1725) was a Quaker cloth merchant of London who around 1679 began to carry on philanthropic work to improve the lives of the poor. Toward this end, he put forward a number of proposals, verbally and in books. Best known of these is his *Proposals for Raising a Colledge of Industry of all useful Trades and Husbandry . . .* which first appeared in 1695. In 1710, Bellers published *Some Reasons for an European State . . .*, presenting in essence a plan for a supranational organization like the League of Nations or the United Nations.

In 1714, Bellers published a treatise in which he set forth a plan for a national health service. This is the substance of his *Essay Towards the Improvement of Physick. In Twelve Proposals. By which the Lives of many Thousand of the Rich, as well as of the Poor, may be Saved Yearly. With an Essay for Employing the Able Poor, by which the Riches of the Kingdom may be greatly Increased; Humbly Dedicated*

to the Parliament of Great Britain.

The substance of Beller's argument and proposals may be summed up as follows: Illness and untimely death are a waste of human life. The health of the people is extremely important to the community so that it cannot be left to the uncertainty of individual initiative, which the high incidence of curable disease shows to be inadequate to the task of dealing with this social problem. On these grounds Beller proposed the establishment of hospitals and laboratories to be used as teaching and research centers, the erection of a national health institute, and the provision of medical care to the sick poor.

While the full potentialities of this remarkable plan were to remain unrealized for over two centuries, there was an increasing recognition in Britain during the eighteenth century of the need for medical assistance to certain groups in the population. It was this period, particularly the years from 1714 to 1790, which witnessed the creation of dispensaries, general hospitals in London and the provinces, and hospitals for special groups of patients. The dispensary movement as well as the hospital movement found their impetus chiefly in private initiative and contributions, although there was some governmental assistance in the form of legislative action. This development of private initiative coupled with cooperative action is characteristic of Britain in the eighteenth century. To a very considerable degree this phenomenon is related to the limited character of local governmental activity. In many ways, this very aspect of the governmental system gave increasingly greater scope to private initiative, making it necessary and possible to deal on an empirical basis with new problems as they presented themselves. Indeed, throughout this period Parliamentary action was generally undertaken on the basis of previously established local programs and projects. Out of such activities there gradually emerged a theory of social action in relation to health. This "New Philosophy," as it was called by Sir Thomas Bernard, may be considered the British counterpart of the continental concept of medical police.³⁹ While not as systematically developed, it was an accurate reflection of the activities carried on by physicians and laymen. In fact, the "New Philosophy" did for the area of health and social welfare what Adam Smith achieved contemporaneously for economic organization. It provided a theoretical formulation of the consequences which men had already drawn practically from the new social order. But it was during the seventeenth century that

the basis of this order was created. In retrospect, it is clear that English social policy in relation to medical care first began to take modern form in the seminal seventeenth century.

REFERENCES

1. a. de Schweinitz, K. *England's road to social security*. Philadelphia, Univ. of Pennsylvania Press, 1950, pp. 20-29.
- b. Marshall D. *The English poor in the Eighteenth Century*. London, George Routledge & Sons, 1926, pp. 1-6; 15-18.
- c. James M. *Social problems and policy during the Puritan revolution 1640-1660*. London, George Routledge & Sons, 1930, pp. 241-243.
2. a. Firth, C. H. *Cromwell's army*. New York, James Pott & Co., 1902, pp. 266-270.
- b. James, M. Reference 1c, pp. 254-256.
3. Merton, R. K. Science, technology and society in Seventeenth Century England, *Osiris* 4:360-632, 1938 (see page 422).
4. a. Hartlib, S. *A description of the famous Kingdome of Macaria*, 1641; reprinted in *Harleian Miscellany* 4:382, 1808-1811.
- b. James, M. Reference 1c, pp. 307-308.
- c. Stimson, D. Hartlib, Haak and Oldenburg: Intelligencers, *Isis* 31:309-26, 1940.
- d. Turnbull, G. H. *Samuel Hartlib*. Oxford, 1920.
5. a. Mathew, D. *The social structure of Caroline England*. Oxford, Clarendon Press, 1948, pp. 59-62.
- b. Gretton, R. H. *The English middle class*. London, G. Bell & Sons, 1919, pp. 146-149.
6. Tate, W. E. *The parish chest. A study of the records of parochial administration in England*. Cambridge, England, University Press, 1946, pp. 79; 279.
7. a. James, M. Reference 1c, pp. 273-274.
- b. Woodhouse, A. S. P., editor. *Puritanism and liberty. Being the Army Debates (1647-9) from the Clarke manuscripts with supplementary documents*. London, J. M. Dent & Son, 1938, p. 48.
8. a. Gooch, G. P. *English democratic ideas in the Seventeenth Century*. 2. ed. Cambridge, England, University Press, 1927.
- b. Bernstein, E. *Cromwell and communism. Socialism and democracy in the great English revolution*. London, G. Allen & Unwin, 1930.
- c. Winstanley, G. *The Works of Gerard Winstanley*, edited with an introduction by G. H. Sabine. Ithaca, N. Y., Cornell University Press, 1941.
- d. Rosen, G. Left-wing Puritanism and science, *Bull. Hist. Med.* 15:375-80, 1944.
9. James, M. Reference 1c, pp. 311-313.
10. Fitzmaurice, E. G. *Life of Sir William Petty, 1623-1687*. London, J. Murray 1895, p. 12.
11. a. James, M. Reference 1c, pp. 314-326.
- b. Jones, R. F. Puritanism, science and Christ Church, *Isis* 31:65-67, 1939.
- c. Simon, J. Educational policies and programmes, *Mod. Quart.* 4:154-68, 1949.
- d. Jones, R. F. *Ancients and moderns. A study of the background of the Battle of the books*. (Washington University Studies. New series. Language and literature, No. 6). St. Louis, 1936, pp. 91-123.
12. Houghton, W. E., Jr. History of trades: its relation to Seventeenth-Century thought, *J. Hist. Ideas* 2:33-60, 1941.
13. Petty, W. *Economic writings*, edited by C. H. Hull. Cambridge, England, University Press, 1899, vol. 1, p. 129.
14. Petty, W. Reference 13, p. 244.
15. Clark, G. N. *Science and social welfare in the age of Newton*. Oxford, Clarendon Press, 1937, pp. 121-132.
16. Graunt, J. *Natural and political observations upon the Bills of Mortality*, in

- Petty, W. *Economic writings* (Reference 13), vol. 2, p. 352.
17. Petty, W. *Economic writings* (Reference 13), vol. 1, pp. XIX, IXXII.
18. Petty, W. *The Petty papers. Some unpublished writings of Sir William Petty*, edited from the Bowood papers by the Marquis of Lansdowne. London, Constable & Co., 1927, vol. 1, pp. 255-258; 263-276.
19. Petty, W. *The Petty papers* (Reference 18), vol. 1, p. 176.
20. Petty, W. Reference 18, vol. 2, p. 176.
21. Petty, W. Reference 18, vol. 2.
22. Petty, W. Reference 18, vol. 1, p. 35.
23. Petty W. Reference 18, vol. 1, p. 274.
24. a. Petty, W. *Economic writings* (Reference 13), pp. 109-110; 151; 303; 463; 536.
b. Petty W. *The Petty papers*. (Reference 18), vol. 1, pp. 33; 36-40; 256-257.
c. Fitzmaurice, E. G. *Life of Sir William Petty* (Reference 10), p. 121.
25. Petty, W. *The Petty papers* (Reference 18), vol. 1, p. 267; vol. 2, p. 55.
26. Petty W. *Economic writings* (Reference 13), p. 259.
27. Petty W. *The Petty papers* (Reference 18), vol. 1, p. 195; vol. 2, p. 170.
28. Graunt, J. *Observations* (Reference 16).
29. Petty, W. *Economic writings* (Reference 13), p. 27.
30. Johnson, E. A. *Predecessors of Adam Smith. The growth of British economic thought*. New York, Prentice-Hall, 1937, pp. 117-138.
31. Cunningham, W. *The growth of English industry and commerce in modern times*. Cambridge, England, University Press, 1912, vol. 1, pp. 403 ff.
32. Brown, W. *Astraea abdicatae restauratio or Advice to the Justices of the Peace*. London, 1695.
33. a. Marshall, D. *The English poor in the Eighteenth Century* (Reference 1b), pp. 115-118; 120-122.
b. Tate, W. E. *The parish chest* (Reference 6), pp. 165-166.
c. Fessler, A. A medical contract from the Eighteenth Century, *Brit. med. J.* 2:1112-13, 1950.
34. a. Defoe, D. *An essay upon projects*, 1697, in *The Earlier Life and the Chief Earlier Works of Daniel Defoe*, edited by Henry Morley, London, George Routledge & Sons, 1889, p. 31.
b. Sombart, W. *Der Bourgeois. Zur Geistesgeschichte des modernen Wirtschaftsmenschen*. Munich and Leipzig, Duncker & Humbolt, 1920, pp. 54-55; 66-67.
35. a. Marshall, D. *The English poor in the Eighteenth Century* (Reference 1b), pp. 127-128.
b. de Schweinitz, K. *England's road to social security* (Reference 1a), pp. 53-55.
36. Fox-Bourne, H. R. *The life of John Locke*. New York, Harper, 1876, vol. 2, pp. 376-392.
37. de Schweinitz, K. *England's road to social security* (Reference 1a), p. 53.
38. Bellers, J. *John Bellers, 1654-1725. Quaker, economist and social reformer. His writings reprinted, with a Memoir by A. Ruth Fry*. London, Cassell & Co., 1935, pp. 5-28.
39. *Reports of the Society for Bettering the Condition and Increasing the Comforts of the Poor*. London, W. Bulmer & Co., 1802, vol. 3, p. 2.